

Special Seminar

Title: The study of biodiesel properties from different oils

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Chulabhorn Building 1

Abstract

This attempts to prepare the biodiesel from the vegetable and animal oils and methanol by using KOH (1%wt.) as the catalyst. The reactions yield biodiesel in the range (73-87%), while cottonseed provide highest yield and used vegetable oil gave lowest yield. The conversion of triglyceride (crude oil) to from biodiesel can be studied by obviously the peak area of methyl ester CH_3 and methylene proton CH_2 and form 1H NMR spectroscopy as palm biodiesel gave large conversion of triglyceride. Palm biodiesel also shows high oxidation stability when studied by Rancimat Tester at 110°C under oxygen atmosphere.